MODEL EST66

INSTALLATION & OPERATION MANUAL

Rev.1.01A

CMA DISHMACHINES

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ALI GROUP

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1. Specifications

1.1. EST- 66

	EST-66 L.T.	EST-66 H.T.
WATER CONSUMPTION		
PER RACK (FINAL RINSE)	.49 GAL.	.49GAL.
PER HOUR (FINAL RINSE)	119 GAL.	119 GAL.
CONVEYOR SPEED		
FEET PER MINUTE	6.75	6.75
OPERATING CAPACITY		
RACKS PER HOUR (NSF rated)	243	243
OPERATING TEMPERATURE		
WASH RECOMMENDED	140° - 150° F	150° - 160° F
PUMPED RINSE RECOMMENDED	140° - 150° F	150° - 160° F
FINAL RINSE RECOMMENDED	140° - 150° F	180° - 195° F
WATER REQUIREMENTS		
INLET TEMPERATURE (MIN)	140° F	180° F
WATER INLET SIZE	1/2”	
FINAL RINSE SIZE	1/2”	
DRAIN SIZE	2”	
FINAL RINSE PRESSURE	20 PSI	
HEATERS		
WASH HEATER	13.3 KW/240V, 10KW/208V	
RINSE HEATER	3KW	
MOTORS		
WASH PUMP (2)	1 HP	
RINSE PUMP	1/3 HP	
CONVEYOR	1/8 HP	
DIMENSIONS		
DEPTH	25-1/8”	
WIDTH	66”	
HEIGHT	55 -1/2”-56-1/2”	
STANDARD TABLE HEIGHT	32 ½” adjusts to 34”	
MAX CLEARANCE FOR DISHES	19”	
STRANDARD RACKS	19 ¾” x 19 ¾”	

ELECTRICAL RATING	**VOLTS**	**PHASE**	**AMPS**
	208	1	76
	240	1	84
	208	3	50
	240	3	54
	480	3	26
SHIPPING WEIGHT	810#		(367kg)

2. Getting Started

2.1. Introduction to EST -66

The EST is designed to give maximum cleaning in 66 inches. It represents the cleaning power of machines twice its length. The curtains incorporated in the machine minimize transfer from tank to tank during the wash and sanitizing procedures.

Energy costs for running the EST-66 have been greatly reduced by the introduction of stage washing. EST-66 (energy star) models lower gal/rack ratings are related to new washing stages being introduced: pre-wash/wash/recirculating rinse/final rinse. EST-66 models have one tank for wash water and one tank for pumped rinse water, followed by a final rinse sanitizing rinse.

The supply water to the EST-66L must be a minimum of 140°F, while the EST-66H requires two supply lines; one at a minimum water temperature of 180°F (for RINSE), and the other at a minimum temperature of 140° F (for FILL).

The EST-66 features a scrap tray that may be emptied on a periodic basis without interruption of the flow of work and the manner in which the tank is filled ensures that the dishes are always rinsed with fresh water instead of re-circulated water. The EST-66 machine is designed to deliver 0.49 gallons of fresh rinse water for each rack. This water flows from the rinse and pre-rinse tank into the wash tank, pre-wash tank and then overflows into the scrap tray carrying debris with it, thereby providing a much cleaner environment for the wash and rinse cycles.

There are also enhancements that can be chosen when desired such as optional Vent Hood Adaptors and other machine accessories such as stainless steel dish tables.

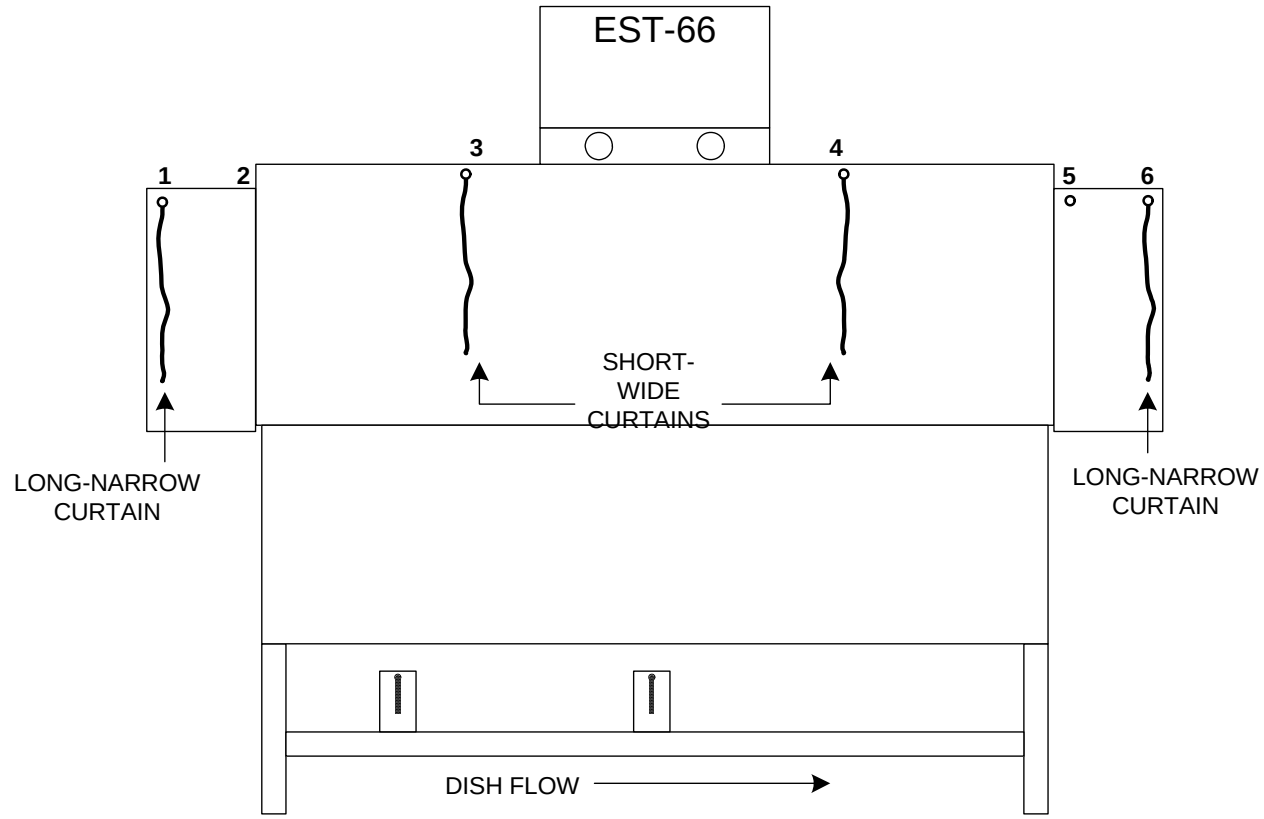
2.2. Receiving and Installation

When you receive your new EST-66, complete the assembly by installing the scrap tray assembly with its overflow chute, the two wrapper shields and the curtain rods, which are shipped inside the machine. After the box has been removed from the machine, remove the left and right stainless steel wrapper shields and bolt them in place with the nuts and bolts provided. The wrapper shield with the extra curtain clamps mounts onto the dirty end of the machine. Next, mount the scrap tray assembly and overflow chute into position (see section **2.2.5 Scrap Tray Assembly**).

All of the spray arms should be inserted and in place over the wash tank compartments.

There are a total of three curtains used in the EST-66; two are long- narrow, one is short- wide. The two long-narrow curtains have shorter rods than the other two curtains. The short rods hold the curtains at the entrance and exit of the machine.

The sketch below lists curtain positions 1 through 6.



DISHMACHINE FRONT VIEW

2.2.1. Electrical*

A 3-phase 208-240 volt AC, 60 Hz dedicated circuit should be used to supply electrical energy to the EST-44 dishwasher (see specification sheet page 2**). Connect the wire that has the highest voltage (stinger lead) to the main contactor's power terminal L2**. Power lead wires (L1, L2 and L3) used for the EST-44 at installation must comply with all local and State electrical codes.

2.2.2. Plumbing*

The water supply connection is made with a ½" hot water line to the water supply inlet on the top of the machine. The water supplied to the machine must be a minimum of 140° F for the EST-66L and a minimum of 180° F for the EST-66H.

NOTES:

1. The Low Temp machine (EST-66L) can be supplied with single point water inlet kit with braided hose included for fill and final rinse inlets connection.
1. The High Temp machine (EST-66H) comes with two water supply line connections. One for the final rinse at 180° F and the second line is to fill the wash tank with 140° F —the water will be heated to the appropriate temperature by the wash tank heater. (See specification sheet on page 2).

There are two 2" drain connections to be made. One connection is made at either end of the horizontal drainpipe coming from the wash tank and the other connection is made at the scrap tray drain. (Instructions for installing the scrap tray assembly are provided in section **2.2.5 Scrap Tray Assembly** .) One of the ends of the horizontal drainpipe has a cap on it – simply move the cap to the other end if it's currently on the end needed for the drain connection.

2.2.3. Installation Notes

1. Tables must slant into the machine for proper drainage (for each 28" of table length a drop of at least ¾" in table height is recommended). See **Figure 2.2.3a**.

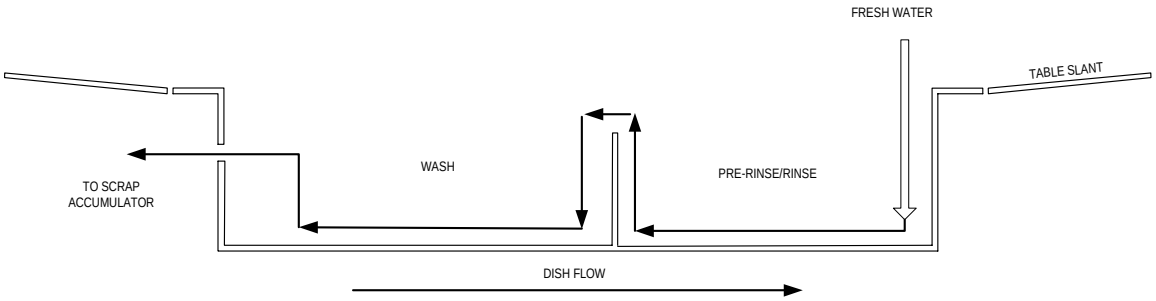


Figure 2.2.3a

See also installation instructions on EST-44 conveyor (Section 4. Customer Notice)

2. The scrap tray assembly is placed inside the machine for shipping. Follow the instructions provided in section **2.2.5 Scrap Tray Assembly** to properly attach the scrap tray assembly to the dishmachine.
3. **Figure 2.2.3b** shows the different settings available on the conveyor cam.

* **Electrical and plumbing connections must be made by a qualified person who will comply with all available Federal, State, and Local Health, Electrical, Plumbing and Safety codes**

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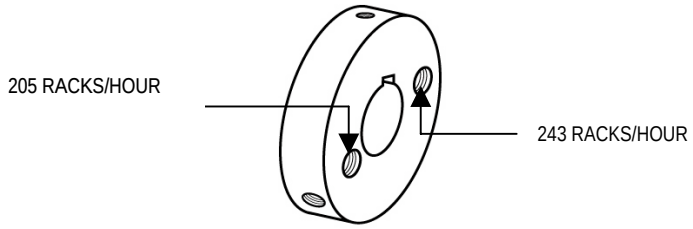


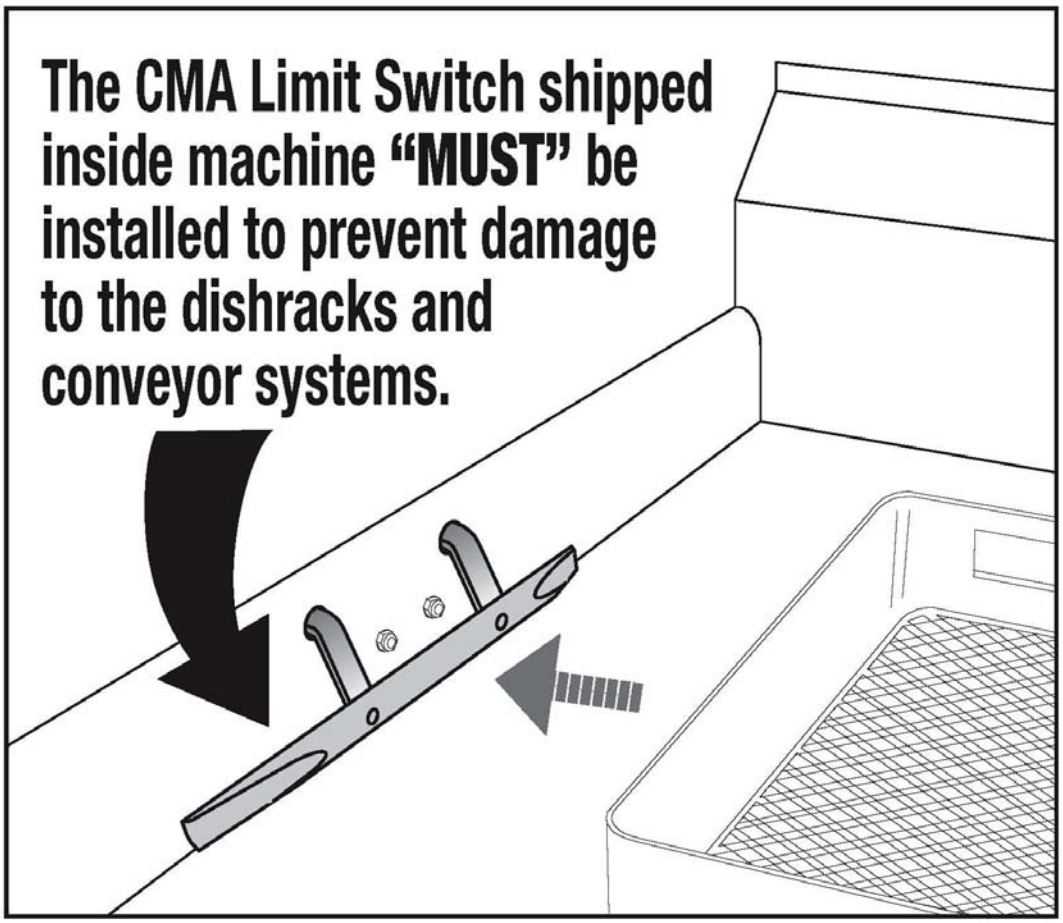
Figure 2.2.3b

4. On a 3-phase machine the water pump motors are also 3-phase and, depending on which terminal each phase is connected to, the motor can rotate in either direction. Check the direction of rotation by removing the dust cap on the back of the motor. The motors must turn clockwise looking at the shaft from the back of each motor. To change the direction of rotation, switch any two power lead wires at the motor.
5. The machine must be running to set the pressure regulator. While the machine is in the FINAL RINSE CYCLE, adjust the pressure regulator to 20 PSI. See section **3.1.1 Rinse Pressure Regulator** for detailed instructions.

2.2.4. Optional Table Limit Switch

(Please see section 5 for Installation Instructions)

CAUTION



The safety back up clutch spring will break eventually if Limit Switch is not installed.

MOST IMPORTANT-

INSTALL CMA LIMIT SWITCH SUPPLIED WITH MACHINE.

2.2.5. Scrap Tray Assembly Installation

The scrap tray assembly and overflow chute, which came packaged inside the machine, can easily be installed by executing the following steps: **Figure 2.2.5** below illustrates the assembly as it would appear for a Left-to-Right machine – a Right-to-Left machine would simply be the mirror image.

Caution: 1.For proper spacing, the SS flat washer (item 5) must ***not*** be located between the head of the truss head bolt and the inside of the machine.

2. The Illustration below shows the correct placements of the scrap trap holder. Don't install upside down, otherwise water deflection takes place.

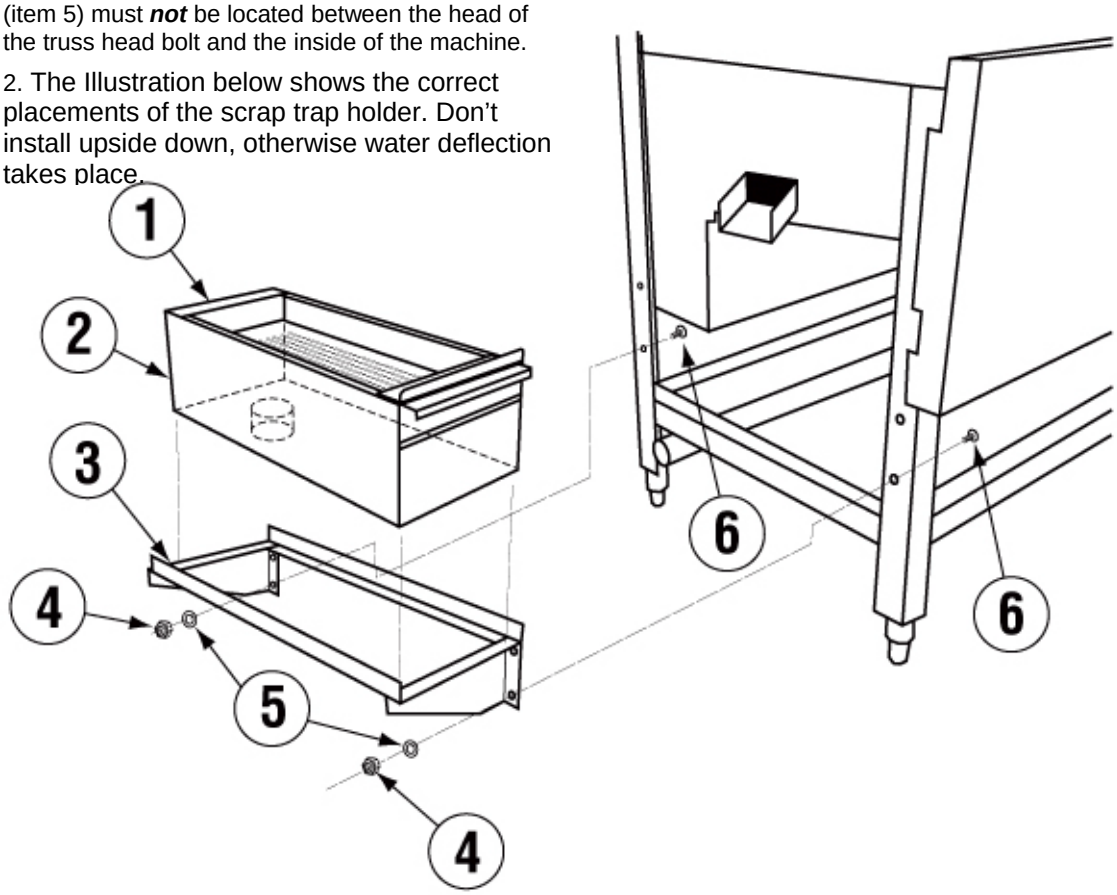


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Figure 2.2.4

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	01577.20	Scrap Trap Drawer Molded
2	1	01577.10	Scrap Trap Body Molded
3	1	17579.00	Scrap Trap Holder

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
4	11	00912.00	¼-20 Nylon Lock Nut
5	11	00924.00	¼" SS Flat Washer
6	4	00906.00	¼-20 X ½" Hex Head Bolt

1. Remove the items from their packing and verify that all the pieces are present.
2. Secure the scrap trap holder to the dishmachine using the four ¼-20 X ½" Hex Head Bolts, ¼" SS Flat Washers, and ¼-20 Nylon Lock Nuts provided.
3. Set the scrap trap body—with the scrap trap drawer inserted—into position on the scrap trap holder.
4. Attach the drain as specified in section **2.2.2 Plumbing**.

2.2.6. Pump Impeller Note

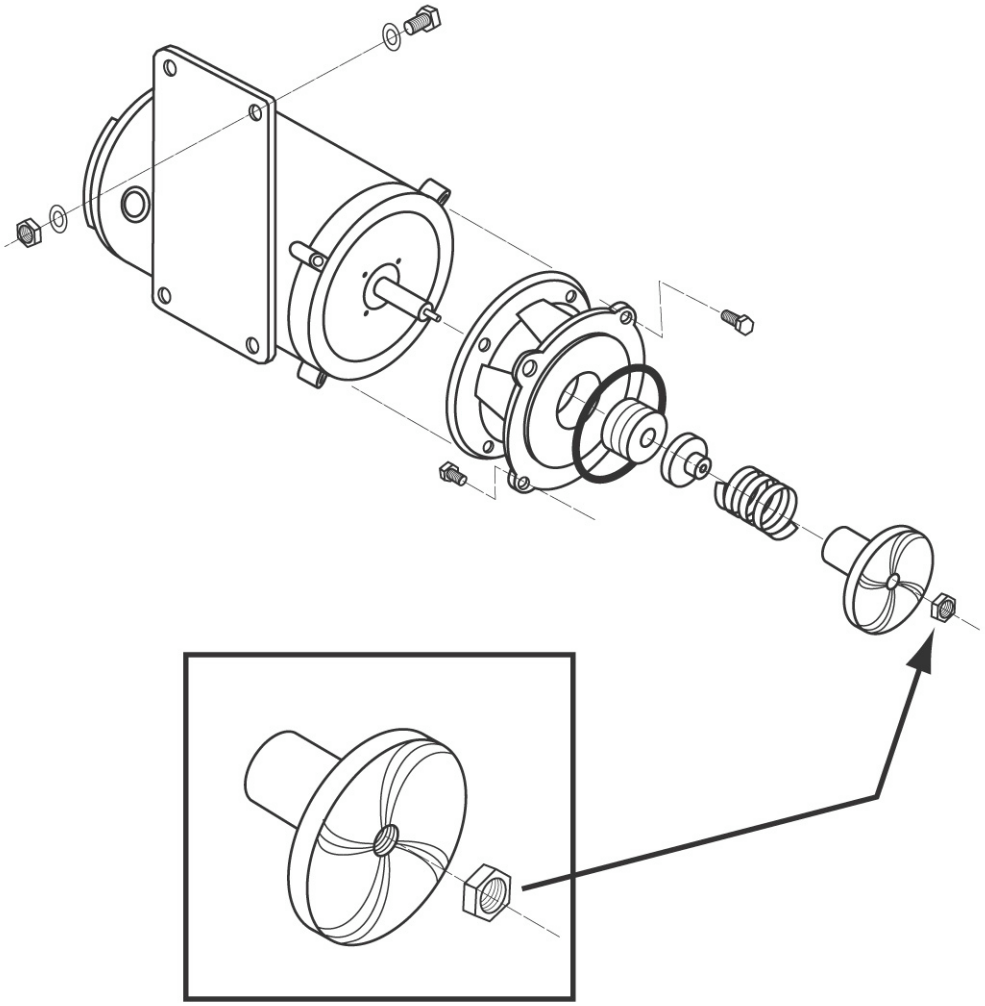


Figure 2.2.5

Installation:

When installing the water pump impeller the **Nylon Lock Nut** indicated by the arrow in **Figure 2.2.5** must be in place to prevent the impeller from spinning off of the shaft and damaging the motor.

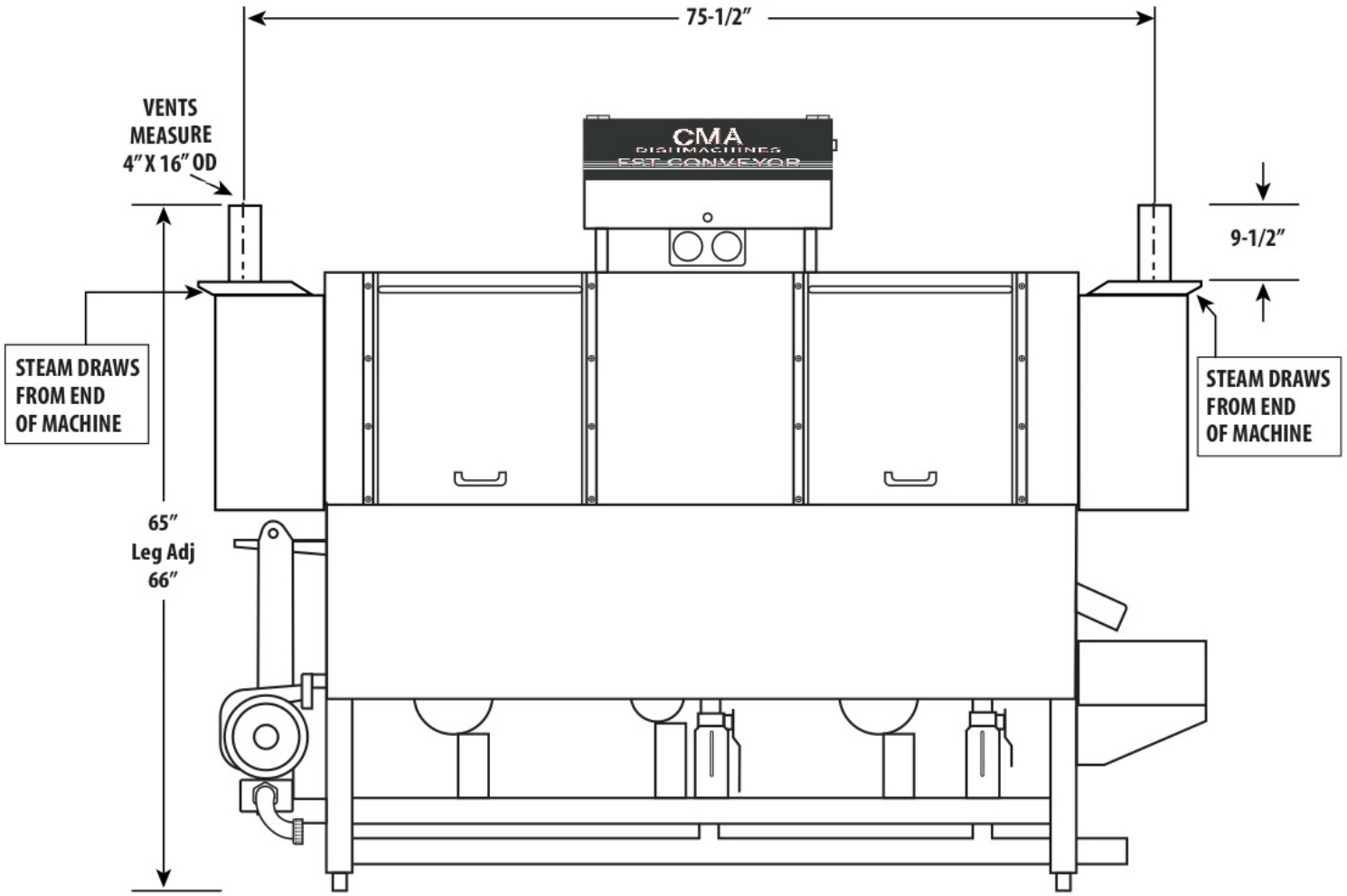
Removal:

The **Nylon Lock Nut** indicated by the arrow in **Figure 2.2.5** must be removed before attempting to remove the water pump impeller.

2.2.7. Optional Hood Adapter (Set of Two)

An optional Hood Adapter set (P/N 13901.82) is available. The dimensions for proper installation are given below.

Caution: open the damper just slightly to prevent heat loss .



Warning: CMA vent hood adapters have been engineered to retain the temperature within the dishmachine. CMA's vent hood adapters are designed to draw steam beyond the outside end curtains. Do not adapt the facilities existing vent hood system to draw the steam between the end curtains and wash chamber, otherwise the wash and power rinse tank will have difficulty maintaining proper temperatures.

2.2.8. Field Installed Accessories

Qualified personnel must perform installation of the accessory chemical pumps.

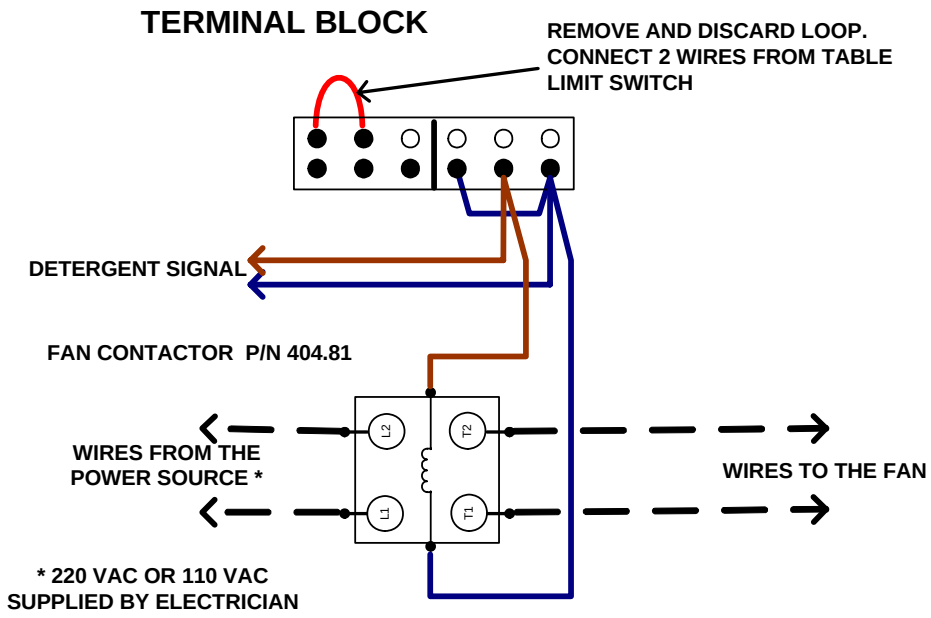
2.2.8.1. Chemical Dispensers

1. Check valves should be installed directly at the mixing chamber coupling. There are two 1/8" FPT mounting holes provided, which will position the check valves parallel to the machine avoiding any chemicals from dripping onto the stainless steel should a leak develop. Simply remove the plug from the mounting hole and install the check valve—be sure to use a proper sealing compound or Teflon tape on the threads*.

   NOTE: There are two mounting holes provided on the mixing chamber coupling, one for rinse chemical and one for sanitizer chemical, but only one is needed with the EST-66H—for rinse chemical only.

2. Connect only to the primary side of the Listed Class 2 Transformer, 208-230 VAC, 60 Hz, 100 VA maximum load.

2.2.8.2. Hood Fan Motor



2.2.9. EST-66 Heaters

Power switch needs to be activated when the machine is ready for operation.

The 10kW heater is located in the wash tank and 3KW heater is located in the rinse tank will come on as soon as the floats sense adequate water level (when the door closed), the same floats will shut the heaters off in the tank that is low. The heater will remain off until the tank is filled to the correct level.

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* * **Electrical and plumbing connections must be made by a qualified person who will comply with all available Federal, State, and Local Health, Electrical, Plumbing and Safety codes**

CMA DISHMACHINES

OPTIONAL CMA E-TEMP™

Hot Water Assurance System
For Conveyor Style Dishwashers

PATENT PENDING

MODEL EST-44 WITH E-TEMP™ BOOSTER HEATER

FEATURES:

- 9kW/12kW 40 degree rise and 15/20kW 70 degree rise
- Single element (40 degree) vs. dual element option (70 degree)
- Tank plug for single element option
- Separate 208 / 240V 3 phase power connection required (electrical connection point provided inside conveyor control panel)
- Pre-plumbed, wired, and secured to the dishmachine
- Non-pressurized system for safe operation
- 9kW @ 208V = 25 amps
  12kW @ 240V = 29 amps
- 15kW @ 208V = 42 amps
  20kW @ 240V = 48 amps
- Field convertible from 40 degree rise to 70 degree rise

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2.3. Safety Tips for the EST-66

DANGER: Always turn off the circuit breaker at the wall when working on this dishmachine. Even with the machine's power switch off there is a live connection coming to the switch, so turn off the circuit breaker as well.

CAUTION: Do not get in the path of the conveyor rocker arm or the conveyor's moving bar. Do not reach into the rocker arm area without first making sure the dishmachine is turned off at the circuit breaker.

CAUTION: Do not open the front door when the machine is in operation.

CAUTION: Avoid spraying water on or around the electrical control box on the top of the machine. When cleaning, do not spray water directly on the motors.

CAUTION: When removing the final rinse arms for cleaning, exercise caution. The final rinse arms may be filled with chemicals and/or under pressure.

3. Operation

3.1. Initial Setup

3.1.1. Rinse Pressure Regulator

The CMA-44 requires a supply water pressure of 24 PSI minimum. The supply water regulator then reduces the pressure. Use the following procedure to adjust the rinse pressure to 20 PSI:

1. Close the door on the machine.
2. Turn the Power switch to the "ON" position.
3. Using a rod or something long to avoid contact with the rinse water, actuate the final rinse trip switch—this activates the water solenoid. With the rinse water flowing adjust the pressure regulator until the gauge reads 20 PSI.

   Adjustment tip: Always adjust “down” when setting this pressure regulator. In other words—intentionally raise the pressure above the desired set point and then carefully bring it down to the correct pressure.

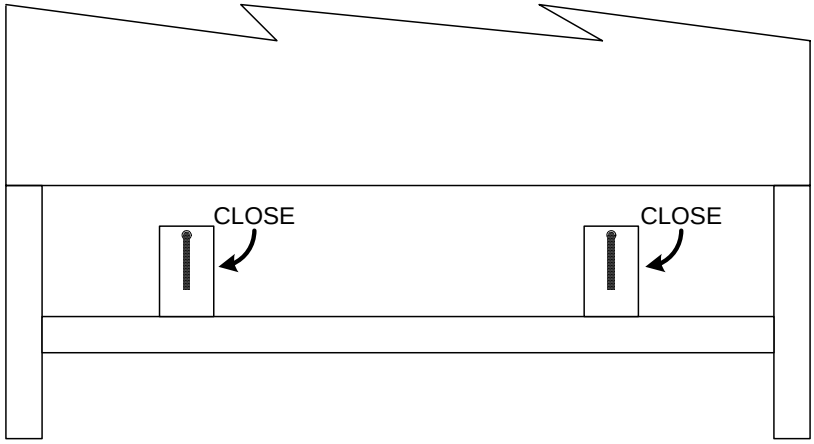
3.1.2. Wash and Rinse Temperatures

The wash and rinse temperatures for the EST-66 are set at the factory. Should you ever find a need to adjust it—after replacement of the thermostat for example—simply perform steps 1 through 4 in section **3.2 Beginning Operation.**

3.2. Beginning Operation

To run the dishmachine, perform the following steps:

1. Close both drains (valve handles in vertical position).



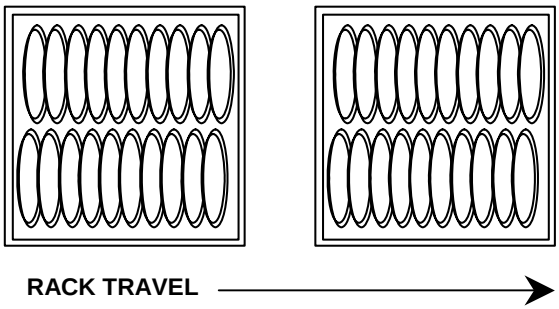
2. Turn on the power to the dishmachine. The machine will automatically fill itself. The float when sensing adequate water level energizes an ice cube relay, which will allow power to go to the heaters while the door is closed and the water temperature is below the thermostat setting.

3. The temperature of the water in the tank should be 140°F – 150°F. The Tank heater will maintain a minimum temperature of 140° F if the final rinse is providing 140°F – 150°F at all times (EST-66L). 150°F minimum will be maintained if the final rinse is 180°F – 195°F (EST-66H).

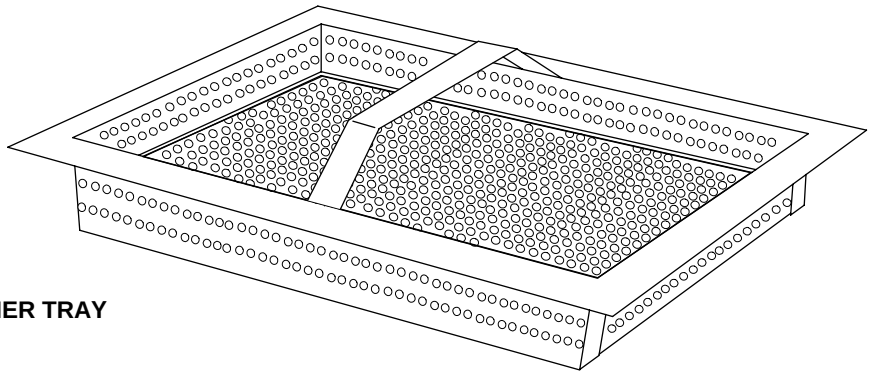
   If the thermostats (located behind the stainless steel covers) should need adjustment—there is a thermostat adjustment access hole located on the covers.

   Tip: If you are having difficulty maintaining wash tank temperature, minimize the vent hood openings by closing off the dampers.

4. Be sure to place the dishes correctly. If they become dislodged, they could interfere with the trip switch lever and interrupt the operation of the machine.

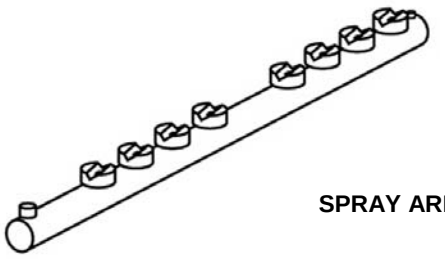


5. At the end of the shift and after heavy periods of accumulation, clean the three strainer trays inside the machine.



STRAINER TRAY

Also, at the end of each shift, remove and clean the six spray arms. Then reinstall them into the machine.



SPRAY ARM

Also, when water becomes heavily soiled, drain the tanks and refill the machine.

6. Check chemical buckets. Make sure there is an adequate supply of detergent, rinse aid and (EST-66 only) sanitizer. Also, verify that the pickup line is inserted into the correct bucket.

7. Slide in a dish rack to activate the cycle start trip switch on the pre-wash end of the machine. The 60-second time-delay-off relay will hold the machine in the run mode for 60 seconds after a rack releases the cycle start switch and then shut off. This time-delay relay prevents the machine from continuing to run when a dish rack is not in the machine.

3.2.1. Chemical Dispensing

This machine must be operated with an automatic detergent feeder and automatic chemical sanitizer feeder, including a visual means to verify that detergents and sanitizers are delivered or a visual or audible alarm to signal if detergents and sanitizers are not available for delivery to the respective washing and sanitizing systems. Please see instructions for electrical and plumbing connections located in this manual and in the feeder equipment manual.

The rinse and sanitizing agents are not injected during the initial fill stage. They are injected into the final rinse make-up water when the final rinse trip switch is activated in the final rinse tank.

3.2.1.1. Low Temperature Applications

See dispenser manufacturing operational instructions for sanitizer adjustments for Low Temp applications.

The sanitizing pump operates when the fresh water enters the machine during final rinse. The water is treated at 50 PPM (parts per million). The pressure regulator is adjusted to 20-PSI. This allows 0.49 gallons of water to enter the machine each time a rack is washed.

It is recommended that the 5-1/4% chemical solution be standardized to allow uniform dispensing of the sanitizing solution into the flow of rinse water as the machine operates. At this level, maximum shelf life is available.

Inside the control box is a labeled power block for the sanitizer and rinse aid, which is powered when the final rinse trip switch is activated. The detergent power block is also labeled and provides power when the conveyor and pump motors are operational.

3.3. Regular Service and Maintenance Checklist

1. Upon entering the facility, make a preliminary check of the flatware and glasses, especially the stemware. This will give you a quick indication of how the machine is functioning.

2. With the circuit breaker providing power to the machine turned off, open the door and check the interior condition of the machine.
   a. The stainless steel on the inside of the machine should be clean and shiny, no dull look or buildup of white lime scale.
   b. Check the condition of the strainer trays for excessive garbage. The machine operator should be cleaning the machine—explain proper cleaning procedures.
   c. Open the drains and check to make sure they are all working properly.
   d. Check float chambers for debris.

3. Once the machine has drained, remove both end curtains and remove all the strainer trays from the machine.
   a. Check all spray arms and jets - clean as necessary. Explain cleaning procedures to the operators.
   b. Check the drain openings making sure they are free and clear of debris.

4. Close the drains, turn the power on and fill the machine.
   a. Check the fill vacuum breaker for leaks.
   b. This is the time to check the water hardness. Check the water at the fill while it is coming into the machine.
   c. Using a rod or something long to avoid contact with the rinse water, actuate the final rinse trip switch and observe the spray pattern on the final rinse jets. (It is easier to see while the pressure is lower.) If you have any clogged rinse jets, clean them using a paper clip or similar wire.
5. Verify that the heater is working. If the temperature is below 140° check the thermostat setting. Also, check that the heater contactor has activated (toggle the heater switch and listen for the contactor pulling in and dropping

out). Check that the float switch is working properly (this will also cause the heater contactor to pull in and drop out when actuated).

6. Replace all the strainer trays into their proper position and fill the machine.

7. Place a rack into the machine and observe the spray pattern of the pre-wash, the wash, and the final rinse.
   a. Check the titration of the wash tank at this point.
   b. While the rack is in the final rinse, check for 50PPM residual chlorine in the final rinse.
   c. Observe the final rinse vacuum breaker for leaks.

8. Run a stemware or glass rack through the machine and check the results on the glassware.
   a. Observe the check valves for the rinse and sanitizer. Make sure they are not leaking or building up chlorine crystals. If they are clean, leave them alone.
   b. Check the condition of the chemical tubing from the peri-pump to the check valves.
   c. Check the peri-pump squeeze tubes to make sure they are tight, pumping product properly and not leaking within the peri-pump. There should be no moisture within the peri-pump itself.
   d. Observe the final rinse pressure at 20 PSI. Adjust if necessary.

9. Check the condition of the chemical tubing coming from the detergent rinse and sani buckets, up to the machine.

10. With the machine stopped, check the roller cam bearing on the conveyor. You should be able to move the outer cover of that roller cam bearing with your finger. Also, keep it well greased so that the outer covering does not freeze up.

11. Check the conveyor system. Make sure the complete system is running smoothly.

12. Send two or three racks through the machine. Check the scrap overflow. While the racks are running through the machine, look under the machine for any drips or leaks coming from the machine or pump seals.

13. Send a rack through the machine and check if the 60-second off delay is operating properly. If the relay is working properly the machine will shut off approximately 60 seconds after the cycle start trip switch is de-activated.

14. Send a rack through and check if the cycle start trip switch is operating properly. Sliding a dish rack into the machine activates the trip switch.

15. Using an all-purpose cleaner or stainless steel polish, clean up the outside of the machine to keep it looking nice.

3.4. Trouble Shooting

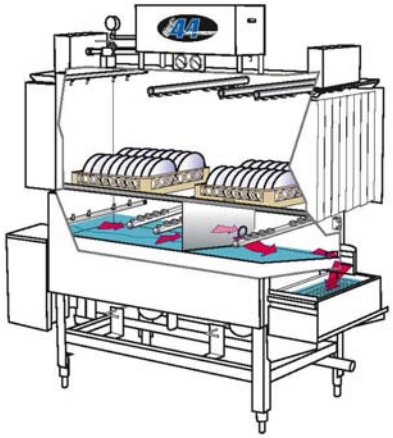
PROBLEM	LIKELY CAUSE	SOLUTION
Pre-wash/power wash motor inoperative	*Bad motor or capacitor* *Faulty contactor*	*Replace defective motor* *Replace contactor*
Machine inoperative	*Fuse is burned out*	*Replace fuse*
	Table limit switch	*Remove dish rack at switch*
	Defective door reed switch	*Replace reed switch*
	Defective start reed switch	*Replace reed switch*
	Defective auto/manual switch	*Replace switch*
	Defective 60 Sec. Timer	*Replace timer*
Machine runs continuously	*Defective 60 Sec. Timer or settings*	*Replace timer or change settings*
	Contactor stuck	*Replace contactor*
Heater (no heat)	*Float switch*	*Check movement-replace it*
	Defective thermostat or setting	*Replace thermostat or adjust*
	Defective heater contactor	*Replace heater contactor*
	Defective heater	*Replace heater*
	Defective heater switch	*Replace switch*
	Wire connections	*Check and correct*
Racks stuck	*Broken rack*	*Replace rack*
	Tray track alignment	*Adjust properly*
Low wash tank temperature	*Low incoming water supply* *(150°F-low temp, 180 °F- high temp)*	*Check hot water supply*
	Thermostat setting	*Adjust thermostat*
	Vent hoods	*Close vents as much as possible*
	Defective heater	*Replace heater*
Low rinse water pressure or no rinse	*Plugged rinse jets*	*Remove and clean*
	Pressure regulator out of adjustment	*Adjust pressure regulator*
	Water sol. valve coil or diaphragm	*Replace or clean*
	Dirty rinse jets	*Remove and clean jets*
	Defective rinse reed switch	*Replace reed switch*
Machine using too much chemical	*Dispenser or settings*	*Check dispenser troubleshooting guide*
	Rinse pressure	*Set 20 psi.*
	Soil	*Check scrap basket sand float function*
Machine loosing water	*Quick drain on pre-wash end*	*Plumb quick drain back into pre-wash tank above water line*
	Sheet pans	*Use CMA sheet pan rack*
	Drain valves open	*Close completely*
Low spray arm pressure	*Tank water level low*	*Check rinse pressure, drain valve open*
	Clogged jets	*Clean jets*
	Motors connected wrong	*Connect motors to reverse impeller direction*

4. EST-66 Customer Notice

IMPORTANT NOTICE

INSTALLATION INSTRUCTIONS ON NEW STYLE EST-44 and EST-66 Conveyors

SOIL PURGING SYSTEM: The EST-44 and EST-66 conveyors are multi-tank dishmachines. These conveyors use very little rinse water, less than one gallon per rack of dishes. The rinse water enters the wash and overflows into the pre-wash tank. As water rises in the pre-wash tank it will overflow from the conveyor (carrying soil) to be discharged into the scrap accumulator. ***For optimum performance of equipment, it is critical that these installation and set-up instructions be followed precisely.***

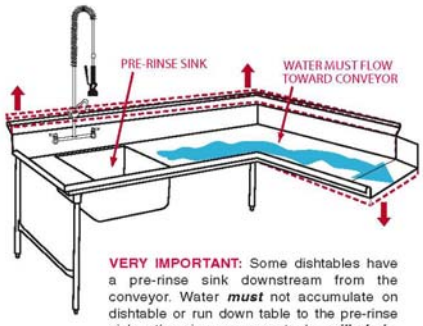


DISHTABLES WITH SCRAP TROUGHS

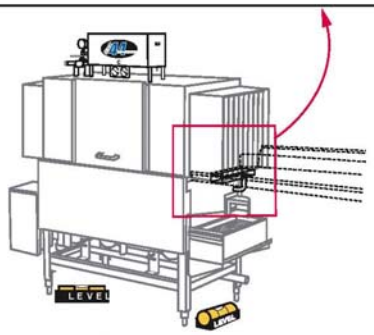
VERY IMPORTANT: Some dishtables have scrap troughs just prior to entering or exiting conveyor.

Please call "CMA Customer Service" at 800-854-6417 for important installation instruction relating to table scrap troughs or see Customer Notice Section 4 in Installation & Operation Manual.

DISHTABLES



VERY IMPORTANT: Some dishtables have a pre-rinse sink downstream from the conveyor. Water ***must*** not accumulate on dishtable or run down table to the pre-rinse sink; otherwise conveyor tanks ***will drain. The dishtable must slant toward the conveyor to prevent loss of water.***



VERY IMPORTANT: These units ***must*** be installed ***level*** to the floor, and all the rinse water must be processed through the conveyor and exit the scrap accumulator via the ***overflow***. If ***any water*** is allowed to discharge by other means, the conveyor tanks ***will drain. If the tanks drain, there will be substantial loss in spray arm pressure, and dishes and utensils will not be cleaned and sanitized properly.***

8-19-09

TIPS TO SAVE A SERVICE CHARGE

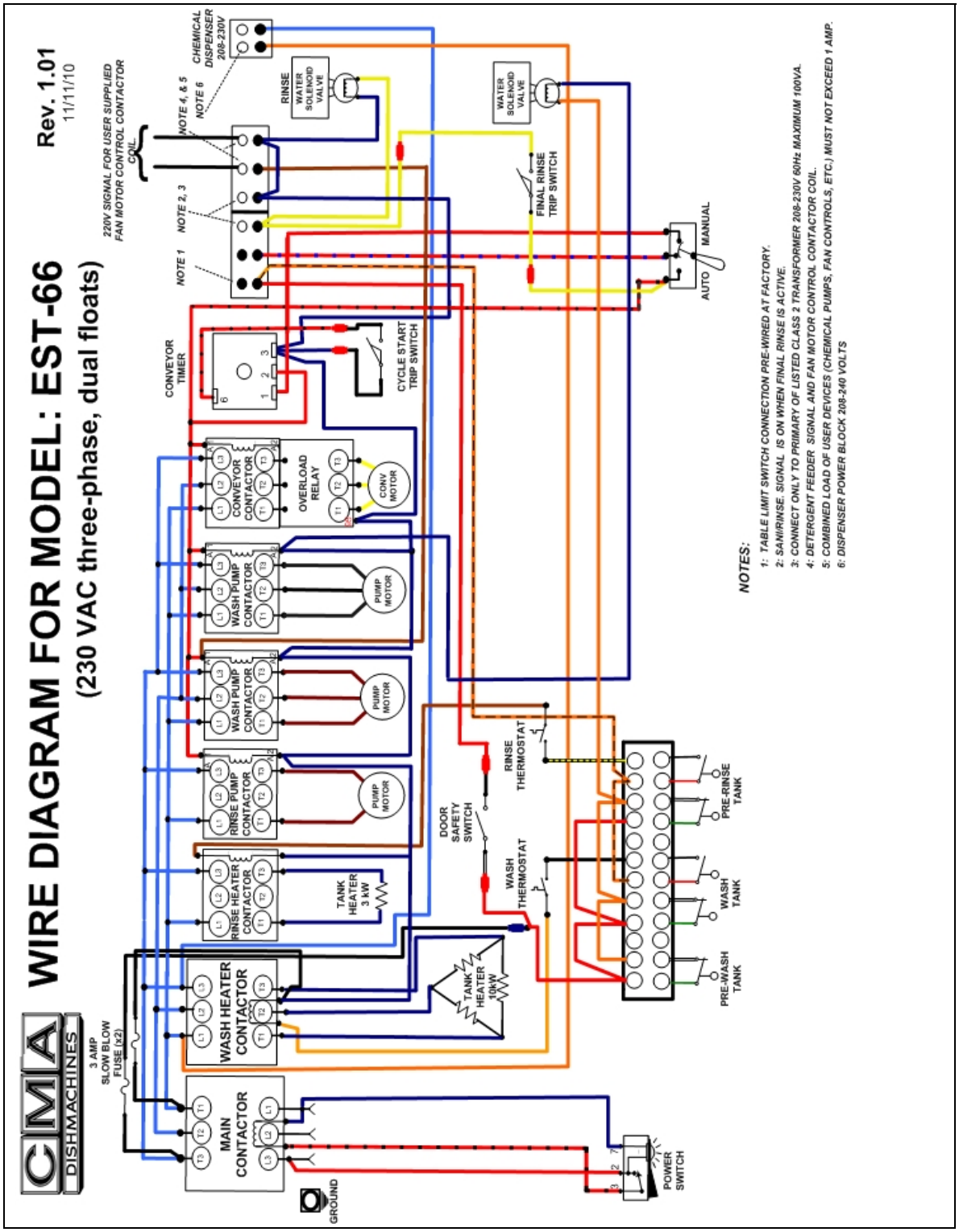
If the Lessee of this equipment initiates a service call and it is subsequently determined that the problem does not relate to part failure or out of chemicals, there will be a minimum service charge for a service person to respond.

It is recommended that you check the following items before initiating a service call:

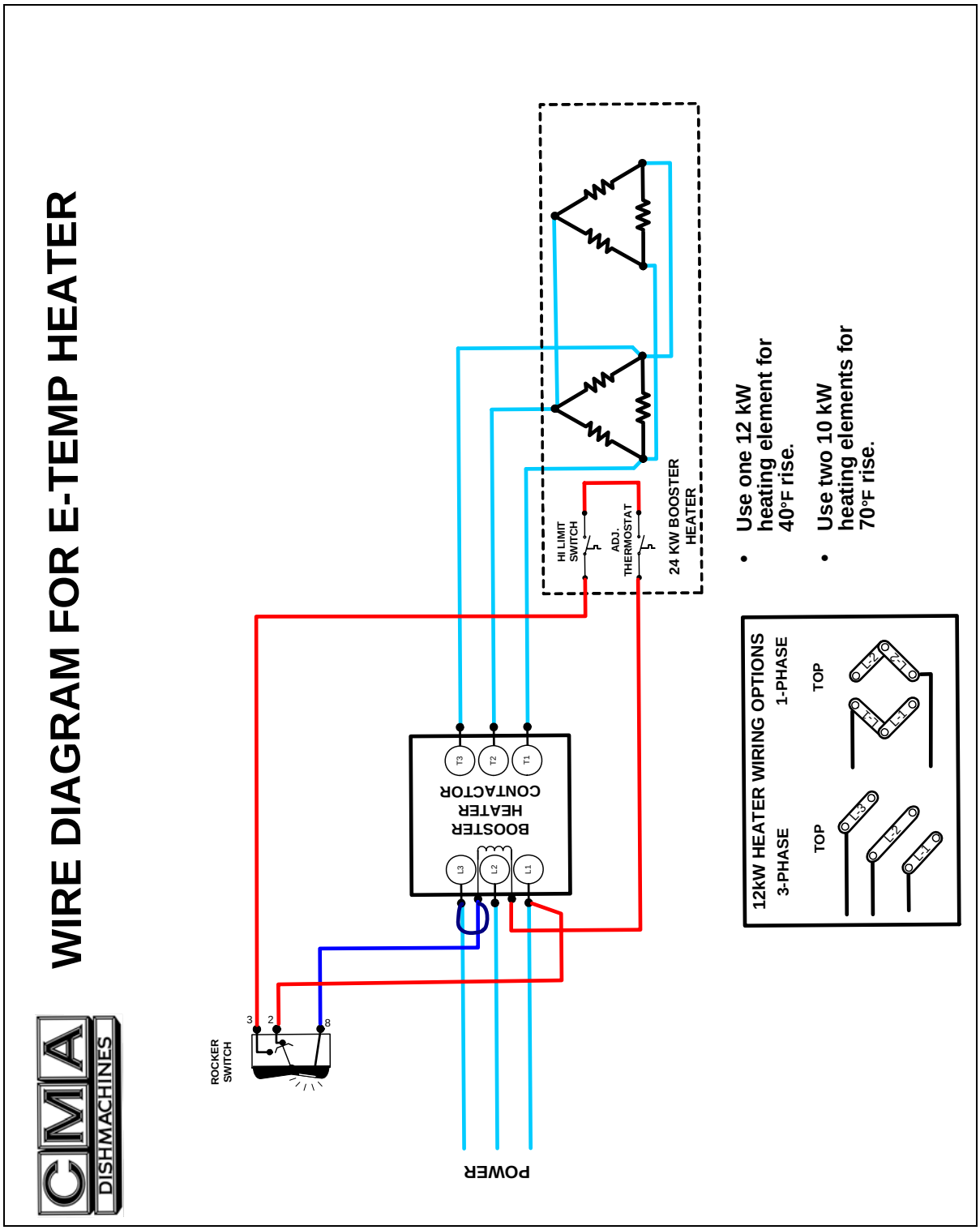
- Circuit breaker position. Should be “ON”.
- Clogged drains (at any point in drain line).
- Lack of soft water (check salt level in brine tank).
- Lack of hot water due to valves shut off or incorrect thermostat settings.
- Failure of equipment unrelated to the machine.
- Abuse to equipment or failure to perform minimum cleaning requirements as outlined at time of installation.
    a. Rinse and wash arm tips clean and free of debris.
    b. Strainer trays clean and free of debris.
    c. Water tank drains clean and free of debris.
- Trip switch blocked or held from free movement due to a lodged utensil or dish.
- Lines to chemical buckets found in wrong containers or empty. (Lines to the buckets are color-coded.)

Lessee’s service responsibility shall be limited to its initial orientation, delivery of chemicals, adjustment of chemical injection system, and replacement of parts found to be worn or defective.

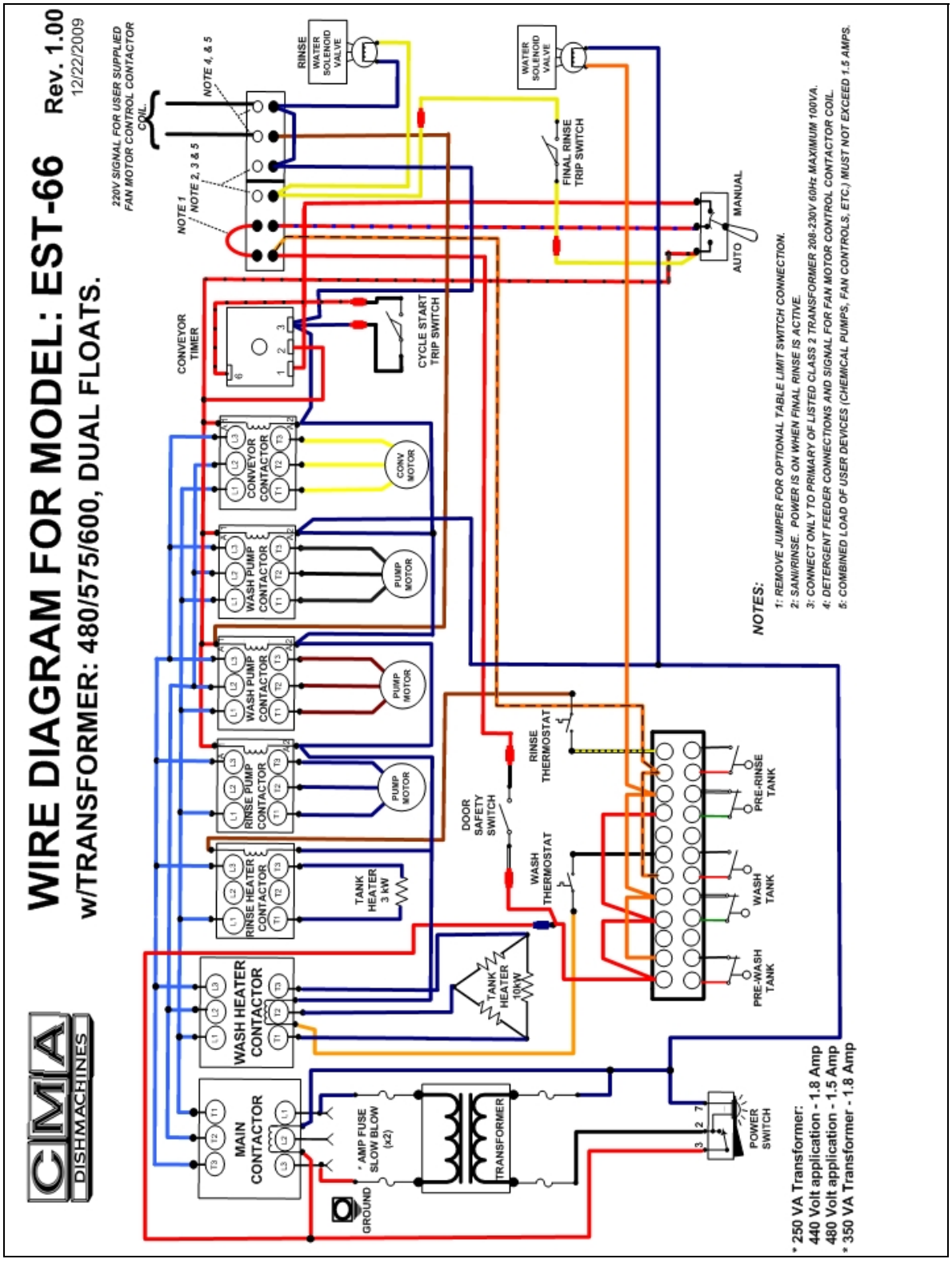
5. Electrical Diagram For 230V EST-66



6. Electrical Diagram For E-Temp Heater Only



7. Electrical Diagram For 480V EST-66


WIRE DIAGRAM FOR MODEL: EST-66
w/TRANSFORMER: 480/575/600, DUAL FLOATS.
Rev. 1.00
12/22/2009
CMA DISHMACHINES
220V SIGNAL FOR USER SUPPLIED FAN MOTOR CONTROL CONTACTOR COIL.
NOTE 4, & 5
NOTE 1
NOTE 2, 3 & 5
RINSE WATER SOLENOID VALVE
WATER SOLENOID VALVE
FINAL RINSE TRIP SWITCH
MANUAL
AUTO
CONVEYOR TIMER
CYCLE START TRIP SWITCH
CONVEYOR CONTACTOR
CONV MOTOR
WASH PUMP CONTACTOR
PUMP MOTOR
RINSE PUMP CONTACTOR
RINSE HEATER CONTACTOR
TANK HEATER 3 kW
DOOR SAFETY SWITCH
RINSE THERMOSTAT
WASH THERMOSTAT
PRE-RINSE TANK
WASH TANK
PRE-WASH TANK
TANK HEATER 10kW
WASH HEATER CONTACTOR
MAIN CONTACTOR
* AMP FUSE SLOW BLOW (x2)
TRANSFORMER
GROUND
POWER SWITCH
NOTES:
1: REMOVE JUMPER FOR OPTIONAL TABLE LIMIT SWITCH CONNECTION.
2: SANI/RINSE. POWER IS ON WHEN FINAL RINSE IS ACTIVE.
3: CONNECT ONLY TO PRIMARY OF LISTED CLASS 2 TRANSFORMER 208-230V 60Hz MAXIMUM 100VA.
4: DETERGENT FEEDER CONNECTIONS AND SIGNAL FOR FAN MOTOR CONTROL CONTACTOR COIL.
5: COMBINED LOAD OF USER DEVICES (CHEMICAL PUMPS, FAN CONTROLS, ETC.) MUST NOT EXCEED 1.5 AMPS.
* 250 VA Transformer:
440 Volt application - 1.8 Amp
480 Volt application - 1.5 Amp
* 350 VA Transformer - 1.8 Amp